

Trend Study 14-27-99

Study site name: Mormon Pasture Point.

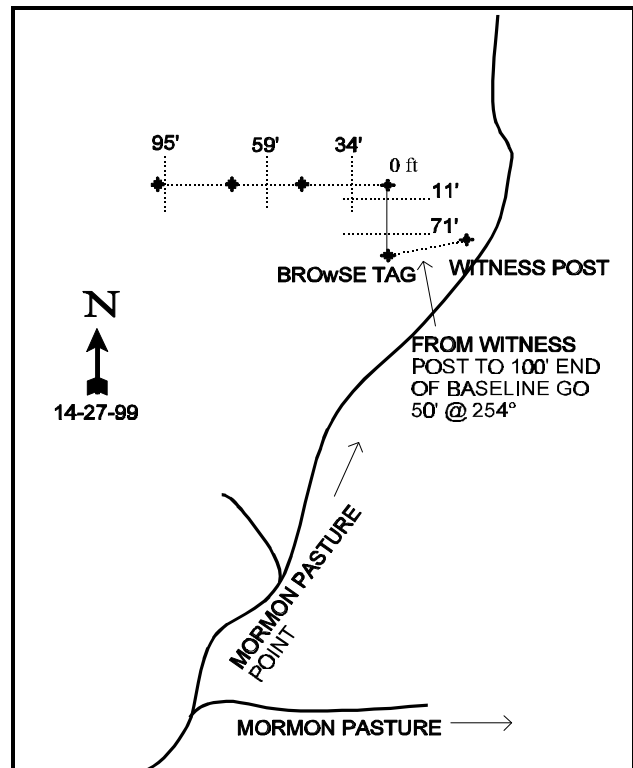
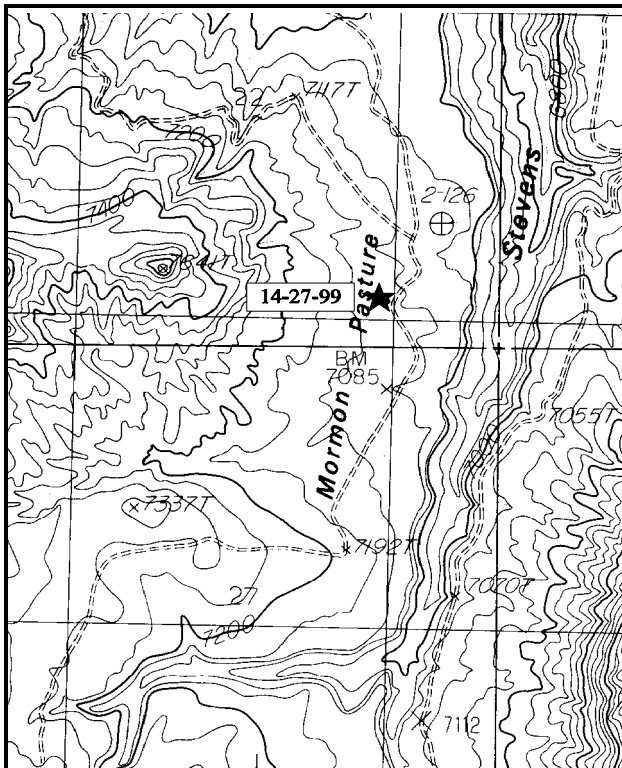
Range type: Chained, Cabled, Seeded P-J.

Compass bearing: frequency baseline 165°M.

Footmark (first frame at) 5 feet, footmarks (frequency belts) line 1 (11 & 71ft), line 2 (34ft), line 3 (59ft), line 4 (95ft).

LOCATION DESCRIPTION

From the Gooseberry Guard Station, go 4 miles east towards the Causeway to a fork. Turn left towards Mormon Pasture and drive 1.2 miles to two mining cabins. Stay right, pass the uranium quarry, and go 0.9 miles to a fork. Stay left for 2.1 miles to the transect. There is a witness post (3 foot tall green fence post) on the left side of the road. The 100-foot end of the baseline is 50 feet west of the witness post and is marked with browse tag #7883.

Map Name: Cathedral Butte

Diagrammatic Sketch

Township 33S, Range 20E, Section 22

UTM 4194117.218 N, 614014.962 E

DISCUSSION

Trend Study No. 14-27 (36-15)

The Mormon Pasture Point trend study is located in an open rolling valley between high red cliffs and the beginning of a deep canyon. The area drains to the north into Steven's Canyon. At the study site, aspect is east on a 10% slope and an elevation of 7,100 feet. The site once supported a pinyon-juniper woodland, but approximately 900 acres were chained and seeded in the early 1970's. A follow-up treatment of Tordon was done in 1985 on 200 acres at the north end of the chaining. Prescribed burning is a possible future treatment. Point quarter data from 1999 estimate 52 juniper and 41 pinyon trees/acre. Average diameter of juniper was 3.5 inches and that of pinyon 3.1 inches. Twenty-one percent of the juniper trees sampled were knocked down (tipped over) chained trees that are still living.

The Forest Service is managing the area for cattle grazing. As part of the Cottonwood allotment, it is grazed by 676 cattle (3,718 AUMs) on a three unit rest-rotation system. In 1986, this unit was grazed during the first half of the season. Utilization of grasses was light to moderate. In 1992, cattle use was moderate for grasses. The area also receives spring and fall deer and elk use, with some summer use. Pellet group data from 1999 estimate 5 deer days use/acre (12 ddu/ha), 21 elk days use/acre (52 edu/ha), and 36 cow days use/acre (89 cdu/ha). Most of the cow pats appear to be from last season, however there were some cows a few hundred yards south of the study site in 1999. Elk sign encountered was fairly recent.

The light tan soil is moderately deep with a layer of loose duff on the surface. Effective rooting depth varied from about 8 inches to 21 inches and averaged almost 16 inches. A calcium carbonate hard pan was encountered in some areas of the study, but overall there is little rock in the profile. Soil texture is a sandy clay loam with a slightly alkaline pH (7.5). Phosphorus is limited at just 3.8 ppm. Amounts less than 10 ppm have been shown to inhibit normal plant growth and development. There are some gullies on the site, although they appear to be healing. Protective ground cover is moderately high leaving only isolated areas of exposed bare ground.

The chained site is dominated by mixed browse in association with a dense perennial grass understory. The browse component is mainly clumps of Gambel oak, with scattered serviceberry, true mountain mahogany, bitterbrush, snowberry, and young pinyon and juniper. There is also some big sagebrush that was not encountered in the 1986 or 1992 samples, but was picked up in 1999. The low-growing bitterbrush, a preferred browse forage, is heavily utilized giving plants a clubbed growth form. The oak and serviceberry are the largest plants, averaging 5 to 7 feet in height. The oak especially appears to have an expanding population with a large proportion of the population classified as young.

Perennial grasses are abundant and provide valuable forage. They currently ('99) provide 62% of the total vegetation cover. The most abundant grass in 1989 and 1992 was intermediate wheatgrass which provides good forage and erosion control. Crested wheatgrass was present in 1986, yet only in low numbers. It increased significantly in 1992 as did intermediate wheatgrass. In 1999, these two seeded grasses produce 96% of the grass cover. There are a few native perennial grasses present, however they occur in small numbers. The grasses are vigorous, reproducing, and show some utilization although abundant forage is still available for winter use. At least 12 species of forbs occur on the site, with none especially abundant, nor do they provide much forage. However, they do help provide some early spring green-up for migrating deer and elk.

1986 APPARENT TREND ASSESSMENT

It appears that the woody plants, especially oak and possibly pinyon-juniper are on the increase. However, the grasses are also vigorous. Without heavy grazing pressure, they should be able to maintain a stable population. Currently the area provides a variety of browse and herbaceous forage. Considering the variety

of uses it receives, it appears at the ideal successional point at which to maintain the composition. The woody species will continue to increase, as demonstrated by nearby areas with a thick browse cover. Future treatments such as fire or herbicide, may be warranted on small tracts of woody species. The soil is easily erodible and disturbance could cause serious soil loss. Current trend is probably improving because of the increasing vegetation and litter cover.

1992 TREND ASSESSMENT

Trend for soil appears to be improving. Percent cover for bare ground has declined from 27% to 19%. Litter cover has also declined slightly, but not enough to warrant a declining trend. Because of the expanded area being sampled, more shrub species have been picked up and some notably clumped species like oak, have estimated densities that are much closer to their true mean. By inspecting the data, one can see that with only one exception (bitterbrush), the shrubs all show signs of expanding populations with outstanding biotic potentials (proportion of seedlings to the population) with a high percentage of young plants. Trend for browse is up. Trend for herbaceous understory is down slightly with nested frequency values for grasses and forbs both showing significant declines since 1986.

TREND ASSESSMENT

soil - up slightly

browse - up

herbaceous understory - down

1999 TREND ASSESSMENT

Trend for soil is down since 1992 due to a small decline in litter cover combined with a dramatic increase in percent cover of bare ground from 19% to 32%. Percent cover of vegetation also fell from 40% to 30%. Trend for browse is up slightly. Density of bitterbrush and Gambel oak have increased and Wyoming big sagebrush has finally become abundant enough to be picked up in the sample. Utilization of bitterbrush is more moderate this year, but vigor is poor on 38% of the plants sampled and percent decadence has increased to 38%. Oak is more heavily browsed, although vigor is good and percent decadence has declined from 16% to only 1%. Trend for the herbaceous understory is stable. Sum of nested frequency of perennial grasses has declined slightly while frequency of forbs increased slightly. Nested frequency of the dominant grass, intermediate wheatgrass declined, but not significantly.

TREND ASSESSMENT

soil - down

browse - up slightly

herbaceous understory - stable

HERBACEOUS TRENDS --
Herd unit 14 , Study no: 27

Type	Species	Nested Frequency			Quadrat Frequency			Average Cover %	
		'86	'92	'99	'86	'92	'99	'92	'99
G	Agropyron cristatum	a32	b88	b80	11	35	31	4.67	2.90
G	Agropyron dasystachyum	b218	a3	a-	74	2	-	.15	-
G	Agropyron intermedium	a157	b313	b270	60	96	87	19.43	13.35
G	Carex spp.	12	9	14	6	6	7	.46	.16
G	Oryzopsis hymenoides	b36	a16	a19	16	6	7	.28	.26
G	Poa fendleriana	a1	b25	b22	1	12	9	.23	.29
G	Poa pratensis	7	-	-	2	-	-	-	-
G	Sitanion hystrix	b63	a-	a-	25	-	-	-	-
G	Stipa comata	-	-	3	-	-	1	-	.03
Total for Annual Grasses		0	0	0	0	0	0	0	0
Total for Perennial Grasses		526	454	408	195	157	142	25.25	17.00
Total for Grasses		526	454	408	195	157	142	25.25	17.00
F	Arabis spp.	a-	a-	b6	-	-	3	-	.01
F	Astragalus tenellus	b68	a29	a9	32	12	7	.85	.49
F	Calochortus nuttallii	ab3	a-	b7	1	-	3	-	.01
F	Cirsium spp.	3	6	5	2	2	2	.18	.01
F	Cymopterus spp.	ab5	a-	b7	2	-	3	-	.04
F	Descurainia pinnata (a)	-	-	1	-	-	1	-	.00
F	Eriogonum racemosum	2	-	-	1	-	-	-	-
F	Gilia aggregata	-	3	-	-	2	-	.01	-
F	Heterotheca villosa	-	3	-	-	1	-	.03	.00
F	Hymenoxys acaulis	b22	a-	b12	9	-	4	-	.09
F	Ipomopsis aggregata	3	-	-	2	-	-	-	.00
F	Lesquerella rectipes	a17	b42	ab30	7	22	13	.28	.16
F	Lomatium spp.	a-	a-	b6	-	-	4	-	.02
F	Machaeranthera canescens	3	3	1	2	1	1	.00	.00
F	Pedicularis centranthera	-	-	4	-	-	1	-	.00
F	Penstemon pachyphyllus	26	20	18	12	10	9	.59	.20
F	Petradoria pumila	3	8	14	2	5	7	.66	.66
F	Phlox longifolia	11	11	25	4	4	9	.04	.07
F	Polygonum douglasii (a)	-	-	1	-	-	1	-	.00
F	Senecio multilobatus	2	-	3	1	-	1	-	.00
F	Sphaeralcea coccinea	b70	ab45	a38	29	20	16	.76	.35
F	Taraxacum officinale	1	1	-	1	1	-	.03	-
F	Tragopogon dubius	b22	a-	a-	14	-	-	-	-
F	Trifolium spp.	a-	b7	b12	-	3	5	.04	.07
Total for Annual Forbs		0	0	2	0	0	2	0	0.00

T y p e	Species	Nested Frequency			Quadrat Frequency			Average Cover %	
		'86	'92	'99	'86	'92	'99	02	09
	Total for Perennial Forbs	261	178	197	121	83	88	3.49	2.23
	Total for Forbs	261	178	199	121	83	90	3.49	2.24

Values with different subscript letters are significantly different at $\alpha = 0.10$

BROWSE TRENDS --

Herd unit 14 , Study no: 27

T y p e	Species	Strip Frequency		Average Cover %	
		02	09	02	09
B	Amelanchier utahensis	5	4	1.33	1.97
B	Artemisia tridentata wyomingensis	0	5	-	.01
B	Cercocarpus montanus	1	0	-	.15
B	Chrysothamnus nauseosus	0	0	-	-
B	Gutierrezia sarothrae	8	1	.00	.15
B	Juniperus osteosperma	5	2	1.67	1.38
B	Juniperus scopulorum	1	0	-	-
B	Opuntia spp.	5	6	.04	.03
B	Pinus edulis	0	2	3.08	.88
B	Purshia tridentata	2	7	1.00	.93
B	Quercus gambelii	4	13	2.00	2.59
B	Ribes spp.	1	0	-	-
B	Symphoricarpos oreophilus	1	0	-	-
	Total for Browse	33	40	9.17	8.13

CANOPY COVER --

Herd unit 14 , Study no: 27

Species	Percent Cover 09
Amelanchier utahensis	.40
Juniperus osteosperma	.80
Pinus edulis	2
Quercus gambelii	5

BASIC COVER --

Herd unit 14 , Study no: 27

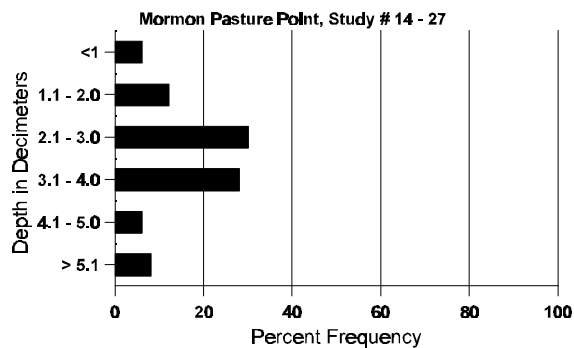
Cover Type	Nested Frequency		Average Cover %		
	'02	'09	'86	'92	'99
Vegetation	339	314	2.50	39.79	29.47
Rock	20	37	0	2.72	.47
Pavement	42	100	.75	0	1.24
Litter	251	368	69.50	51.04	48.66
Cryptogams	4	5	0	.24	.06
Bare Ground	201	273	27.25	18.57	31.65

SOIL ANALYSIS DATA --

Herd Unit 14, Study # 27, Study Name: Mormon Pasture Point

Effective rooting depth (inches)	Temp °F (depth)	pH	%sand	%silt	%clay	%OM	PPM P	PPM K	dS/m
15.8	57.4 (16.6)	7.5	53.6	17.8	28.6	1.4	3.9	118.4	0.6

Stoniness Index



PELLET GROUP DATA --

Herd unit 14 , Study no: 27

Type	Quadrat Frequency		Pellet Transect Days Use/Acre (ha)
	'02	'09	
Rabbit	51	20	N/A
Elk	8	8	21 (52)
Deer	15	1	5 (12)
Cattle	7	5	36 (89)

BROWSE CHARACTERISTICS --

Herd unit 14, Study no: 27

A G R E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Amelanchier utahensis																		
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	3	-	-	-	-	-	-	-	-	3	-	-	60		3	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	92	1	-	-	1	-	-	-	-	-	-	2	-	-	40	-	2	
	99	-	1	1	-	-	-	2	-	-	-	4	-	-	80	89 90	4	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		60%			00%			00%			-20%							
'99		25%			25%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	100		-			
												'99	80		-			
Artemisia tridentata wyomingensis																		
S	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	-	-	-	1	-	-	-	-	-	-	1	-	-	20		1	
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	4	-	-	-	-	-	-	-	-	-	4	-	-	80		4	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	99	1	4	1	-	-	-	-	-	-	-	6	-	-	120	16 24	6	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%										
'99		40%			10%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	0		-			
												'99	200		-			
Cercocarpus montanus																		
S	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	2	-	-	-	-	-	-	2	-	-	40		2	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	86	-	1	-	-	-	-	-	-	-	-	1	-	-	33	55 43	1	
	92	-	1	-	-	-	-	-	-	-	-	1	-	-	20	-	1	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0	44 39	0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		100%			00%			00%			-39%							
'92		100%			00%			00%										
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	33	Dec:	-			
												'92	20		-			
												'99	0		-			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Chrysothamnus nauseosus																		
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0	21	32	0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
		'86			00%			00%			00%							
		'92			00%			00%			00%							
		'99			00%			00%			00%							
Total Plants/Acre (excluding Dead & Seedlings)												'86		0	Dec:	-		
												'92		0		-		
												'99		0		-		
Gutierrezia sarothrae																		
S	86	-	-	-	-	-	-	-	-	-	-	-	-	0			0	
	92	1	-	-	1	-	-	4	-	-	6	-	-	120			6	
	99	-	-	-	-	-	-	-	-	-	-	-	-	0			0	
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	0			0	
	92	4	-	-	3	-	-	-	-	-	7	-	-	140			7	
	99	1	-	-	-	-	-	-	-	-	1	-	-	20			1	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0	
	92	12	-	-	-	-	-	-	-	-	12	-	-	240	-	-	12	
	99	1	-	-	-	-	-	-	-	-	1	-	-	20	-	-	1	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
		'86			00%			00%			00%							
		'92			00%			00%			00%			-89%				
		'99			00%			00%			00%							
Total Plants/Acre (excluding Dead & Seedlings)												'86		0	Dec:	-		
												'92		380		-		
												'99		40		-		
Juniperus osteosperma																		
Y	86	1	-	-	-	-	-	-	-	-	1	-	-	33			1	
	92	4	-	-	-	-	-	-	-	-	4	-	-	80			4	
	99	-	-	-	-	-	-	-	-	-	-	-	-	0			0	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0	
	92	-	-	-	1	-	-	-	-	-	1	-	-	20	-	-	1	
	99	1	-	-	-	-	-	-	1	-	2	-	-	40	-	-	2	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
		'86			00%			00%			00%			+67%				
		'92			00%			00%			00%			-60%				
		'99			00%			00%			00%							
Total Plants/Acre (excluding Dead & Seedlings)												'86		33	Dec:	-		
												'92		100		-		
												'99		40		-		

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Juniperus scopulorum																		
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	92	1	-	-	-	-	-	-	-	-	-	1	-	-	20	-	-	1
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%										
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	20		-			
												'99	0		-			
Opuntia spp.																		
S	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	99	1	-	-	-	-	-	-	-	-	-	1	-	-	20			1
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	92	6	-	-	-	-	-	-	-	-	-	6	-	-	120			6
	99	6	-	-	-	-	-	-	-	-	-	6	-	-	120			6
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	92	4	-	-	-	-	-	-	-	-	-	4	-	-	80	-	-	4
	99	4	-	-	-	-	-	-	-	-	-	4	-	-	80	4	13	4
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%			+ 0%							
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	200		-			
												'99	200		-			
Pinus edulis																		
S	86	2	-	-	-	-	-	-	-	-	-	2	-	-	66			2
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
Y	86	1	-	-	-	-	-	-	-	-	-	1	-	-	33			1
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	99	-	-	-	1	-	-	-	-	-	-	1	-	-	20			1
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	99	1	-	-	-	-	-	-	-	-	-	1	-	-	20	-	-	1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%										
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	33	Dec:	-			
												'92	0		-			
												'99	40		-			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Purshia tridentata																		
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	86	-	1	2	-	-	-	-	-	-	3	-	-	-	100	12	20	3
	92	-	-	4	-	-	-	-	-	-	4	-	-	-	80	-	-	4
	99	-	1	1	-	2	1	-	-	-	4	-	-	1	100	19	50	5
D	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	-	-	-	-	1	2	-	-	-	1	-	-	2	60		3	
X	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	40		2	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		33%			67%			00%			-20%							
'92		00%			100%			00%			+50%							
'99		50%			50%			38%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	100	Dec:	0%			
												'92	80		0%			
												'99	160		38%			
Quercus gambelii																		
S	86	23	1	-	-	-	-	-	-	-	20	3	1	-	800		24	
	92	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
	99	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
Y	86	17	21	-	-	-	-	-	-	-	21	17	-	-	1266		38	
	92	17	-	-	-	-	-	-	-	-	17	-	-	-	340		17	
	99	21	-	-	-	-	-	10	-	-	31	-	-	-	620		31	
M	86	4	11	2	-	-	-	-	-	-	4	13	-	-	566	63	35	17
	92	4	-	-	-	-	-	-	-	-	4	-	-	-	80	-	-	4
	99	19	-	-	3	-	-	5	-	10	37	-	-	-	740	61	40	37
D	86	2	8	-	-	-	-	-	-	-	1	7	1	1	333		10	
	92	3	1	-	-	-	-	-	-	-	4	-	-	-	80		4	
	99	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
X	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	140		7	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		62%			03%			03%			-77%							
'92		04%			00%			00%			+64%							
'99		00%			14%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	2165	Dec:	15%			
												'92	500		16%			
												'99	1380		1%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Ribes spp.																		
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0	59	31	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%										
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	20		-			
												'99	0		-			
Symphoricarpos oreophilus																		
S	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	1	-	-	1	-	-	-	-	-	2	-	-	-	40		2	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
Y	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	92	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	86	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	92	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	99	-	-	-	-	-	-	-	-	-	-	-	-	-	0	28	72	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'86		00%			00%			00%										
'92		00%			00%			00%										
'99		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'86	0	Dec:	-			
												'92	20		-			
												'99	0		-			